Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) Lubricant base oil consisting essentially of a normal paraffin and an isoparaffin, and satisfying the following requirements (a), (b) and (c):

(a) an average carbon number Nc in one molecule is not less than 29 but not more than 35;

(b) an average branch number Nb in one molecule, which is derived from a ratio of CH_3 carbon to total carbon determined by ^{13}C-NMR analysis and the average carbon number Nc in one molecule, is not more than (0.2Nc - 3.1) but not less than 1.5; and

(c) a viscosity index is 145-170 and a kinematic viscosity at 40°C is 17-25 mm^2/s.

2. (Original) Lubricant base oil according to claim 1, which is obtained from an isomerization of a starting straight-chain hydrocarbon material having an average carbon number Nc in one molecule of not less than 25.

3. (Original) Lubricant base oil according to claim 2, wherein the starting straight-chain hydrocarbon material is a Fischer-Tropsch synthetic wax.

4. (Currently Amended) A method of producing the lubricant base oil ~~according to~~of claim 3, which comprises subjecting starting oil composed of a Fischer-Tropsch synthetic wax having a 10% distillation temperature of not lower than 360°C to an isomerization under a condition that a decreasing ratio of a fraction having a boiling point of not lower than 360°C is not more than 40% by weight.

5. (Currently Amended) A method of producing the lubricant base oil ~~according to~~of claim 1, which comprises ~~the following steps~~:

(1) hydroisomerizing a starting straight-chain hydrocarbon material in a first reactor;

(2) separating oil obtained by the hydroisomerization into a fraction mainly composed of a normal paraffin (fraction α) and a fraction mainly composed of an isoparaffin (fraction β);

(3) hydroisomerizing the fraction α in a second reactor, and mixing oil obtained from the hydroisomerization (fraction γ) with the fraction β.

6. (Original) A method according to claim 5, wherein the hydroisomerization in the second reactor is carried out under a reaction condition that a decreasing ratio of a fraction having a boiling point of not lower than 360°C in the hydroisomerization at the second reactor is lower than a decreasing ratio of a fraction having a boiling point of not lower than 360°C in the hydroisomerization at the first reactor.

7. (Original) A method according to claim 5, wherein the starting straight-chain hydrocarbon material is a Fischer-Tropsch synthetic wax.

8. (Original) A method according to claim 7, wherein the Fischer-Tropsch synthetic wax has an average carbon number Nc of not less than 25.

9. (Original) A method according to claim 5, wherein the hydroisomerization in the first reactor is carried out under a reaction condition that a decreasing ratio of a fraction having a boiling point of not lower than 360°C is not more than 50% by weight.

10. (Currently Amended) A method of producing the lubricant base oil ~~according to~~ of claim 2, which comprises ~~the following steps~~:

(1) hydroisomerizing a starting straight-chain hydrocarbon material in a first reactor;

(2) separating oil obtained by the hydroisomerization into a fraction mainly composed of a normal paraffin (fraction α) and a fraction mainly composed of an isoparaffin (fraction β);

(3) hydroisomerizing the fraction α in a second reactor, and mixing oil obtained from the hydroisomerization (fraction γ) with the fraction β.

11. (Currently Amended) A method of producing the lubricant base oil ~~according to~~of claim 3, which comprises ~~the following steps~~:

(1) hydroisomerizing a starting straight-chain hydrocarbon material in a first reactor;

(2) separating oil obtained by the hydroisomerization into a fraction mainly composed of a normal paraffin (fraction α) and a fraction mainly composed of an isoparaffin (fraction β);

(3) hydroisomerizing the fraction α in a second reactor, and mixing oil obtained from the hydroisomerization (fraction γ) with the fraction β.

12. (Previously Presented) A method according to claim 10, wherein the hydroisomerization in the second reactor is carried out under a reaction condition that a decreasing ratio of a fraction having a boiling point of not lower than 360°C in the hydroisomerization at the second reactor is lower than a decreasing ratio of a fraction having a boiling point of not lower than 360°C in the hydroisomerization at the first reactor.

13. (Previously Presented) A method according to claim 11, wherein the hydroisomerization in the second reactor is carried out under a reaction condition that a decreasing ratio of a fraction having a boiling point of not lower than 360°C in the hydroisomerization at the second reactor is lower than a decreasing ratio of a fraction having a boiling point of not lower than 360°C in the hydroisomerization at the first reactor.

14. (Previously Presented) A method according to claim 10, wherein the starting straight-chain hydrocarbon material is a Fischer-Tropsch synthetic wax.

15. (Previously Presented) A method according to claim 11, wherein the starting straight-chain hydrocarbon material is a Fischer-Tropsch synthetic wax.

16. (Previously Presented) A method according to claim 14, wherein the Fischer-Tropsch synthetic wax has an average carbon number Nc of not less than 25.

17. (Previously Presented) A method according to claim 15, wherein the Fischer-Tropsch synthetic wax has an average carbon number Nc of not less than 25.

18. (Previously Presented) A method according to claim 10, wherein the hydroisomerization in the first reactor is carried out under a reaction condition that a decreasing ratio of a fraction having a boiling point of not lower than 360°C is not more than 50% by weight.

19. (Previously Presented) A method according to claim 11, wherein the hydroisomerization in the first reactor is carried out under a reaction condition that a decreasing ratio of a fraction having a boiling point of not lower than 360°C is not more than 50% by weight.

20. (New) Lubricant base oil according to claim 1, wherein the lubricant base oil further satisfies: (d) a pour point of the lubricant base oil is between -10°C to -40°C.